## **Professors**

Susan Golden, sgolden@ucsd.edu

Office Hour: See Canvas for location, hours Michael Gorman, <a href="majorman@ucsd.edu">mgorman@ucsd.edu</a>
Office Hour: See Canvas for location, hours

**Synchronous Professor Sessions:** Wednesdays 3–4:20 on Zoom via Canvas **Synchronous IA Sections:** Friday (various times) on Zoom via Canvas

## Course website - canvas.ucsd.edu

Assignments/quizzes/readings etc. will all be posted on Canvas

Topics Covered	Lecturer
Introduction to chronobiology	SG
Visualizing and quantifying circadian rhythms	MG
Fundamental properties of biological rhythms	MG
Molecular biology primer	SG&MG
Sleep	SG&MG
Entrainment/neuroscience primer	MG
Drosophila – mechanism of its cellular clock	SG
Physiological organization of clocks in mammals	MG
Catch-up/review and Midterm Exam	SG&MG
Midterm May 1-2	
Mammalian cellular clock mechanism	SG
The SCN of mammals	DW
Photoreception in mammals	MG
Systems biology	SP
Plant clocks	SG
Cyanobacterial clocks	SG
Human photoperiodism and Psychiatry	MM
Collecting and using human circadian data: wearables	BS
Entrainment across Models	SG&MG
Tidal rhythms	MG
Integration	_
CUMULATIVE FINAL EXAM June 12-13	
	Introduction to chronobiology Visualizing and quantifying circadian rhythms Fundamental properties of biological rhythms Molecular biology primer Sleep Entrainment/neuroscience primer Drosophila – mechanism of its cellular clock Physiological organization of clocks in mammals Catch-up/review and Midterm Exam Midterm May 1-2 Mammalian cellular clock mechanism The SCN of mammals Photoreception in mammals Systems biology Plant clocks Cyanobacterial clocks Human photoperiodism and Psychiatry Collecting and using human circadian data: wearables Entrainment across Models Tidal rhythms Integration

## **Lecturers:** SG = Susan Golden, Molecular Biology

MG = Michael Gorman, Psychology DW = David Welsh, Psychiatry MM = Michael McCarthy, Psychiatry SP = Satchin Panda, Salk Institute BS = Benjamin Smarr, Bioengineering

<sup>\*</sup> check announcements on Canvas before emailing with questions

<sup>\*</sup> put BIMM116 or PSYC133 in subject line of all emails

**Course organization:** BIMM116/PSYC133 is delivered completely remotely with required synchronous and asynchronous elements. The weekly pattern of assignments is as follows:

- 1. **Self-study**. Course materials are posted minimally 1 week (and generally longer) before related assignments are due. By Wednesday of any given week, you should have viewed the online materials, which include custom, professional quality videos for this class, curated readings and instructor lectures.
- **2. Office Hours**. Professors and IAs hold Zoom office hours throughout the week. Contact your professor about possible in-person office hour by appointment.
- **3. Q/A and discussion** with the professors. On *Wednesdays*, your two professors host an interactive Zoom session to answer live student questions, previously submitted student questions, and points for further interest. These sessions will be recorded and made available to all. Although these sessions will not be used to introduce new material, answers provided may clarify required material.
- **4. Online quizzes.** On Thursdays, after you have had a chance to clarify any material in the Q/A, you will complete untimed quizzes on the material for the week. Of course, you can complete these earlier than Thursday if you feel adequately prepared. Students may retake the online quiz once before the submission deadline and receive the *average* score for their two attempts. Quizzes submitted late will incur penalties.
- **5. Discussion sections.** On Fridays, IAs will conducted required Zoom sections that address any confusions revealed by the quizzing, and that interactively engage the course material at a richer level.

Grading: Final course grades will be calculated as follows

A = 90-100%

B = 80-89.99%

C = 70-79.99%

D = 60-69.99%

F = <60%

Curving of final grades is not expected, but if any adjustments to the scale are made, they will be applied only to *benefit* students (*i.e.*, a more difficult curve will not be used if class performance exceeds expectations). *Final letter grades will be modified with pluses and minuses* (*e.g.*, 80-82.99% = B-; 87-89.99% = B+).

Exams: There will be one midterm exam (35%) and a final exam (40%). The final is cumulative, but more emphasis will be placed on material covered since the midterm. Both exams will be delivered asynchronously, but will have a time limit. Questions will be presented one at a time. Students must provide their final answer before proceeding to the next question and may not return to previous questions. Exams are open book and open note. Communication or collaboration with others, of any sort, is strictly prohibited. Any stretching of this prohibition constitutes academic misconduct. Please remind yourself of the Academic Integrity Policy (below) and consequences of not adhering to it.

Online quizzes: For a total of 10% of your final grade, there will be untimed online quizzes administered through Canvas on assigned videos and course readings. Generally, there will be a quiz associated with every lecture topic so in most weeks there will be two quizzes due. *All quizzes will be due on Thursdays at 3 pm*. You may retake the quiz before the deadline and your first and second attempt scores will be averaged. If you are late AT ALL on the on first attempt, you will not receive any credit for a second attempt, so plan accordingly. Late second

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attempts will also not receive additional credit. There will be 16-18 quizzes. Your two lowest quizzes will be dropped from the calculation of your final grade. Missed quizzes can be submitted late with a penalty, upon request. Quizzes are open book, meaning that you may consult notes, review the materials etc, but no collaboration with others of any sort is permitted. Please remind yourself of the Academic Integrity Policy (below) and consequences of not adhering to it. Students are responsible for monitoring Canvas closely for due dates. Credit for late assignments will be significantly discounted. Students on the waitlist have access to the quizzes and are expected to meet deadlines. Extensions will not be provided to students who are added to the course or waitlist after some due dates have passed.

Participation credit: Section participation will contribute to a total of 15% of your final grade. Sections are held synchronously on Fridays via Zoom at the time posted on the Schedule of Classes and begin in Week 1. Participation in section is required. Points will be awarded for participation in various section activities that may change weekly (e.g., group work, diagnostic quizzes, attendance at beginning, middle or end of section etc). Partial credit may be given. However, section participation is NOT based on correct performance (i.e., if a quiz is given, your participation points will not be determined by how many questions you got right). You receive credit only for participation in your assigned section. Sections will not meet the Friday immediately after the midterm exam. Of the remaining 9 sections, you may miss two with no penalty. There are no make-ups for missed sections – if you miss a section, it counts as one of your allowed absences, regardless of the reason you miss. You do not have excused absences on top of the two sections everyone can miss.

**Extra Credit** (Q/A participation): Students are strongly encouraged to attend or view the recorded Q/A sessions. Extra credit will be awarded for submitting a relevant and substantive question via the Canvas assignment link for each session, or for asking a live question via Zoom (by voice or chat). Participation in each session is worth 0.4% up to a total of 2% of your final grade.

**Drops and Withdrawals:** In accordance with current university policy.

**Incompletes:** Only for medical emergencies, not for other personal reasons. Requests must be made prior to the final exam, **NOT** after. Requests must be made in writing: a passing grade in the course up to that point is also a campus requirement for an "I".

**Make-up Exams:** Available only in the case of a documented emergency. Make-up exams are likely to be in an alternative format including essays and/or oral examination. You must decide whether you are well enough to take an exam; a grade will not be dropped after the fact because you state that you took an exam while sick. Any accommodation regarding missed exams will be evaluated in light of the fact that the exams are available over an extended interval. Do not wait until the last minute before exams are due to request accommodation.

**Instructional Assistants**: IAs (TAs and tutors) are wonderful resources. Take advantage of the additional value they can offer in this class. Their contact information, office hours and academic biographies will be posted online.

**Academic Integrity:** The standard of academic conduct for UCSD students requires that no student shall engage in <u>any</u> activity that involves attempting to receive a grade by means other than their own honest effort; for example, no student shall:

a. knowingly procure, provide, or accept any unauthorized materials that contain questions or answers to any examination or assignment to be given at a subsequent time;

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- b. complete, in part or in total, any examination or assignment for another person;
- c. knowingly allow any examination or assignment to be completed, in part or in total, for himself or herself by another person;
- d. plagiarize or copy the work of another person and submit it as his or her own work;
- e. employ aids excluded by the instructor in undertaking coursework;
- f. without proper permission, alter graded class assignments or examinations and then resubmit them for regrading.
- g. make any false statements to achieve any deviation from course requirements

\*\*\* While students are welcome to prepare study aids and share with other students via platforms such as Quizlet, they may NOT upload any question from an assigned quiz or exam. Doing so constitutes academic misconduct. If you find exam questions posted to Quizlet or other sites, do not consult and please notify your IA or Professors.

UCSD Policy on Integrity of Scholarship "The principle of honesty must be upheld if the integrity of scholarship is to be maintained by an academic community. The University expects that both faculty and students will honor this principle and in so doing protect the validity of University grading. This means that all academic work will be done by the student to whom it is assigned, without unauthorized aid of any kind. Officers of instruction, hereinafter called instructors, for their part, will exercise care in planning and supervising academic work, so that honest effort will be encouraged."

Violation of Academic Integrity will result in failure in the course as well as other serious penalties.

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